

## SEQUENCE LISTING

<110> REGENTS OF THE UNIVERSITY OF CALIFORNIA  
 TSIEN, Roger  
 TING, Alice  
 ZHANG, Jin

<120> EMISSION RATIONOMETRIC INDICATORS OF PHOSPHORYLATION

<130> REGEN1550

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<170> PatentIn version 3.0

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Glu Leu Asp Gly Asp Val Asn Gly His Lys Phe Ser Val Ser Gly Glu	
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ggt gaa ggt gat gca aca tac gga aaa ctt acc ctt aaa ttt att tgc	144
Gly Glu Gly Asp Ala Thr Tyr Gly Lys Leu Thr Leu Lys Phe Ile Cys	
35 40 45	
act act gga aaa cta cct gtt cca tgg cca aca ctt gtc act act ttc	192
Thr Thr Gly Lys Leu Pro Val Pro Trp Pro Thr Leu Val Thr Thr Phe	
50 55 60	
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Ser Tyr Gly Val Gln Cys Phe Ser Arg Tyr Pro Asp His Met Lys Gln	
65 70 75 80	
cat gac ttt ttc aag agt gcc atg ccc gaa ggt tat gta cag gaa aga	288
His Asp Phe Phe Lys Ser Ala Met Pro Glu Gly Tyr Val Gln Glu Arg	
85 90 95	
act ata ttt ttc aaa gat gac ggg aac tac aag aca cgt gct gaa gtc	336
Thr Ile Phe Phe Lys Asp Asp Gly Asn Tyr Lys Thr Arg Ala Glu Val	
100 105 110	
aag ttt gaa ggt gat acc ctt gtt aat aga atc gag tta aaa ggt att	384
Lys Phe Glu Gly Asp Thr Leu Val Asn Arg Ile Glu Leu Lys Gly Ile	
115 120 125	
gat ttt aaa gaa gat gga aac att ctt gga cac aaa ttg gaa tac aac	432
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F04350" T6259360

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gtc gag ctg gac ggc gac gta aac ggc cac aag ttc agc gtg tcc ggc      96
Val Glu Leu Asp Gly Asp Val Asn Gly His Lys Phe Ser Val Ser Gly
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gag ggc gag ggc gat gcc acc tac ggc aag ctg acc ctg aag ttc atc      144
Glu Gly Glu Gly Asp Ala Thr Tyr Gly Lys Leu Thr Leu Lys Phe Ile
              35              40              45

tgc acc acc ggc aag ctg ccc gtg ccc tgg ccc acc ctc gtg acc acc      192
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65              70              75              80

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100 105 110

gtg aag ttc gag ggc gac acc ctg gtg aac cgc atc gag ctg aag ggc 384  
Val Lys Phe Glu Gly Asp Thr Leu Val Asn Arg Ile Glu Leu Lys Gly  
115 120 125

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Ile Asp Phe Lys Glu Asp Gly Asn Ile Leu Gly His Lys Leu Glu Tyr  
130 135 140

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165 170 175

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180 185 190

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Cys Thr Thr Gly Lys Leu Pro Val Pro Trp Pro Thr Leu Val Thr Thr

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 Glu Gly Glu Gly Asp Ala Thr Tyr Gly Lys Leu Thr Leu Lys Phe Ile  
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 Ile Asp Phe Lys Glu Asp Gly Asn Ile Leu Gly His Lys Leu Glu Tyr  
 130 135 140  
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 145 150 155 160  
 ggc atc aag gtg aac ttc aag atc cgc cac aac atc gag gac ggc agc 528  
 Gly Ile Lys Val Asn Phe Lys Ile Arg His Asn Ile Glu Asp Gly Ser  
 165 170 175  
 gtg cag ctc gcc gac cac tac cag cag aac acc ccc atc ggc gac ggc 576  
 Val Gln Leu Ala Asp His Tyr Gln Gln Asn Thr Pro Ile Gly Asp Gly  
 180 185 190  
 ccc gtg ctg ctg ccc gac aac cac tac ctg agc tac cag tcc gcc ctg 624

104350 1629960



Pro Val Leu Leu Pro Asp Asn His Tyr Leu Ser Tyr Gln Ser Ala Leu  
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agc aaa gac ccc aac gag aag cgc gat cac atg gtc ctg ctg gag ttc 672  
Ser Lys Asp Pro Asn Glu Lys Arg Asp His Met Val Leu Leu Glu Phe  
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Cys Thr Thr Gly Lys Leu Pro Val Pro Trp Pro Thr Leu Val Thr Thr  
50 55 60

Phe Gly Tyr Gly Val Gln Cys Phe Ala Arg Tyr Pro Asp His Met Lys  
65 70 75 80

Gln His Asp Phe Phe Lys Ser Ala Met Pro Glu Gly Tyr Val Gln Glu  
85 90 95

Arg Thr Ile Phe Phe Lys Asp Asp Gly Asn Tyr Lys Thr Arg Ala Glu  
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Val Lys Phe Glu Gly Asp Thr Leu Val Asn Arg Ile Glu Leu Lys Gly  
115 120 125

Ile Asp Phe Lys Glu Asp Gly Asn Ile Leu Gly His Lys Leu Glu Tyr  
130 135 140

Asn Tyr Asn Ser His Asn Val Tyr Ile Met Ala Asp Lys Gln Lys Asn  
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Gly Ile Lys Val Asn Phe Lys Ile Arg His Asn Ile Glu Asp Gly Ser  
165 170 175

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gag ggc gag ggc gat gcc acc tac ggc aag ctg acc ctg aag ttc atc 144  
Glu Gly Glu Gly Asp Ala Thr Tyr Gly Lys Leu Thr Leu Lys Phe Ile  
35 40 45  
tgc acc acc ggc aag ctg ccc gtg ccc tgg ccc acc ctc gtg acc acc 192  
Cys Thr Thr Gly Lys Leu Pro Val Pro Trp Pro Thr Leu Val Thr Thr  
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65 70 75 80  
cag cac gac ttc ttc aag tcc gcc atg ccc gaa ggc tac gtc cag gag 288  
Gln His Asp Phe Phe Lys Ser Ala Met Pro Glu Gly Tyr Val Gln Glu  
85 90 95  
cgc acc atc ttc ttc aag gac gac ggc aac tac aag acc cgc gcc gag 336  
Arg Thr Ile Phe Phe Lys Asp Asp Gly Asn Tyr Lys Thr Arg Ala Glu  
100 105 110  
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Val Lys Phe Glu Gly Asp Thr Leu Val Asn Arg Ile Glu Leu Lys Gly  
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"0344" 16299860

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Gln	Tyr	Gly	Ser	Lys	Val	Tyr	Val	Lys	His	Pro	Ala	Asp	Ile	Pro	Asp
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296															
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344															
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asn	pHe	Glu	asp	Gly	Gly	val	val	Thr	val	thr	Gln	asp	Ser	Ser	Leu
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pro	Ser	asp	Gly	Pro	Val	met	Gln	Lys	Lys	Thr	met	Gly	Trp	Glu	ala
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488															
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HIS	Lys	Ala	Leu	Lys	Leu	Lys	asp	Gly	Gly	HIS	Tyr	Leu	Val	Glu	Phe
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584															
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Lys	Ser	Ile	Tyr	Met	Ala	Lys	Lys	Pro	Val	Gln	Leu	Pro	Gly	Tyr	Tyr
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632															
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Tyr	Val	asp	Ser	Lys	Leu	asp	Ile	Thr	Ser	HIS	ASN	Glu	asp	Tyr	Thr
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680															
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728															
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T04250" T029980

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<222> (4)..(4)

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<223> Xaa is Lysine or Arginine

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 <223> Xaa is any Amino Acid

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104230 "T626360

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&lt;223&gt; Synthetic peptide

&lt;220&gt;

&lt;221&gt; VARIANT

&lt;222&gt; (2)..(2)

&lt;223&gt; Xaa is Arginine or Lysine

&lt;220&gt;

&lt;221&gt; VARIANT

&lt;222&gt; (3)..(3)

&lt;223&gt; Xaa is Phenylalanine, Arginine, Serine or Asparagine

&lt;220&gt;

&lt;221&gt; VARIANT

&lt;222&gt; (4)..(4)

&lt;223&gt; Xaa is Arginine, Histidine, Lysine

&lt;220&gt;

&lt;221&gt; VARIANT

&lt;222&gt; (5)..(5)

&lt;223&gt; Phosphorylated peptide

&lt;220&gt;

&lt;221&gt; VARIANT

&lt;222&gt; (6)..(6)

&lt;223&gt; Xaa is Tryptophan, Tyrosine, Phenylalanine, Leucine

&lt;400&gt; 42

Arg Xaa Xaa Xaa Ser Xaa Pro

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